UNITED STATES DEPARTMENT OF AGRICULTURE
Rural Electrification Administration
Finance Division
St. Louis 2, Missouri

ADJUSTMENTS AND ACCRUALS

Text No. 6

1. ADJUSTING THE PRE-CLOSING TRIAL BALANCE

A pre-closing trial balance shows amounts resulting from the opening real account balances plus business transactions recorded during the fiscal accounting period. Before the final statements can be prepared it is necessary in almost every case to adjust the pre-closing trial balance by a series of entries known as adjusting entries. These adjusting entries serve two definite purposes: (1) reduce mixed accounts into their real and nominal elements, and (2) reflect in the books unrecorded information that must be included in the statements. The results gained by proper adjustments may be summarized as follows: Income is shown as profit for the period during which it is earned; expenses are recorded in the period to which they apply; all known assets and liabilities are disclosed; therefore, net worth is accurately stated.

Specifically, the following types of adjustments may be required at the close of an accounting period:

1. Correction of any error discovered when the trial balance is taken.
2. Entry of transactions near the end of a period which are unrecorded.
3. Inventories of merchandise.
4. Accrued assets offset by income (unrecorded).
5. Expenses (unrecorded) offset by accrued liabilities.
6. Estimated depreciation of properties.
7. Estimated bad debts, or losses from uncollectible accounts.
8. Prepaid expenses, also referred to as deferred charges (assets).
9. Unearned income, also called deferred credits (liabilities).

2. CORRECTIONS AFTER THE TRIAL BALANCE HAS BEEN TAKEN

If the trial balance totals do not "balance" an error has been made. The error may be in the listing of the ledger account balances on the trial balance. If the amount of an account balance is incorrectly listed, obviously the trial balance totals will not agree. If a debit balance is listed as a credit, or vice versa, the trial balance totals will be out by twice the amount incorrectly listed. When an account balance is omitted by oversight, one column will be short this amount.

When account balances are listed correctly but the trial balance totals do not agree, there may be an error in posting or computing the ledger account balances. An error may be made in adding debits and credits in an account when computing the balance. If an account balance has been computed properly, postings may be incorrect. If a debit is posted as a credit, or vice versa, the account balance is wrong by twice the amount so posted.

For example, if the Land account were $5,000 and a lot costing $2,000 were purchased, the correct balance is $7,000. If this debit were posted as a credit, the balance would appear as $3,000, the error of $4,000 being twice the amount of $2,000 incorrectly posted. Errors in posting amounts frequently are either a "slide" or a transposition of figures. As an example of the latter, $150 could be posted as $105, making an error of $45. If a slide were made and the $150 posted as $15, the amount of error would be $135. In either case, the amount of error is divisible by 9 -- hence when a trial balance is out of balance by an amount that is divisible by 9 a transposition or slide is probable.

Of course, in journalizing, each entry should contain equal debits and credits; otherwise the ledger trial balance will reflect the error. Whenever there are any errors in journalizing prior to taking the trial balance, a correction is required. If a journal entry is made debiting or crediting the wrong account, adjustment of such an error may be made in either of two ways: (1) Reverse the incorrect entry and then record the transaction as it should have been entered; (a) prepare an entry correcting only that part of the original entry that is conceded to be wrong. For example, the following entry was made:

	DR.	CR.
Cash	$100	
Richard Heron		$100
Collection on account.		

The bookkeeper later learns that it was Richard Hearn, not Richard Heron, who made the payment. The entries required under the first method would be:

	DR.	CR.
Richard Heron	$100	
Cash		$100
To reverse erroneous entry on page --, cash being paid by Richard Hearn.		
Cash	$100	
Richard Hearn		$100
Correct entry for collection on account. See journal page -- and above.		

Under the second method, only one journal entry would be necessary:

	DR.	CR.
Richard Heron	$100	
Richard Hearn		$100
To correct entry on page -- in which Richard Heron's account was credited in error for payment by Richard Hearn.		

In the foregoing illustration, the second method is perhaps simpler and therefore to be preferred inasmuch as the original debit to Cash was correct. However, when correction involves both the debit and credit parts of the original entry, or when mistakes are somewhat complicated, it is easier to make the correction by reversing the erroneous entry and then recording the correct one.

Again, before attempting to adjust the trial balance, consideration must be given to all transactions that are completed at the end of the accounting period but that are not properly recorded in the books. Thus, if an unentered invoice covering goods actually received is discovered after the trial balance has been taken, an entry debiting Purchases and crediting an account payable would be required. Other invoices covering expense items such as advertising and store supplies might be found; if so, they should be taken into account by adjusting entries. At the close of the period, be sure that none of these unrecorded items is overlooked, because failure to recognize this type of adjustment affects both the profit and loss statement and the balance sheet. (Review Section 4, Text No. 5).

3. MERCHANDISE INVENTORY

Text No. 5 explained the procedure in determining the cost of goods sold through the Purchases account at the close of the period. The cost of goods available for sale was developed by transferring the opening inventory, freight inward, purchases returns and allowances, etc. to Purchases; and the real element of goods on hand was removed by the adjusting entry debiting Inventory and crediting purchases.

Instead of using the Purchases account some bookkeepers open a summary account, subsidiary to Profit and Loss, entitled "Cost of Sales" to which is transferred the opening inventory, purchases, freight and cartage in, returns and allowances, etc. Under this method, the closing inventory is recorded by a debit to Inventory and a credit to Cost of Sales account. The balance of Cost of Sales is then closed to profit and loss. Inasmuch as the final result is the same whether the Purchases account or a separate Cost of Sales account is used, the method previously illustrated will be followed in these texts.

4. ACCRUED ASSETS RESULTING IN INCOME

An accrued item of income may be defined as the value of a service partly rendered in one accounting period for which payment is not due until some later date and which, for that reason, is unrecorded until the books are closed. A common example of this type of accrued asset and income is found in the case of interest accruing on notes receivable. For example, suppose that we hold an interest-bearing note, face amount \$3,000, dated December 11, due in sixty days, and the rate of interest is 6%. If we close our books on December 31, it is obvious that interest in the amount of \$10.00 (\$3,000 x .06 x 20/360) has accrued on this note up to December 31. But since the amount mentioned is not due and payable until forty days after the end of the year, it follows that no record of this item will appear upon the books when the trial balance is taken. The fact remains, however,

that the interest which has accrued up to December 31 is an earning based upon services rendered (use of money) during the current period. Our claim against the maker of the note for this interest is an asset. In other words, there is an increase of assets with a corresponding income item that must be recognized at the close of the period by an adjusting entry. Obviously, unless proper adjustment is made the profit and loss statement will not reflect all income applicable to the current period, and total assets and net worth will be understated on the balance sheet. The journal entry required would be:

December 31, 19--	DR.	CR.
Accrued Interest Receivable	$10.00	
Interest Income		$10.00
To record interest accrued to date on interest-bearing note receivable, dated December 11.		

The debit portion of this entry represents a current asset to be realized in cash and the credit portion is an increase of income. An asset such as accrued interest receivable that gradually accumulates in favor of the business is known as an accrued asset and the income with which assets of this kind are always associated is referred to as accrued income.

Take another example. Suppose that a real estate concern on December 1 rents a building at $100 a month collectible at the end of each three months. If the books of the owner are closed on December 31, obviously one month's rent has been earned but has not been recorded on the books because this rent is not due and collectible until March 1 of the next year. Here again we have an accrued asset, resulting from income, that should be recorded by an adjusting entry at the time of closing. The entry would be:

December 31, 19--	DR.	CR.
Accrued Rent Receivable	$100.00	
Rent Income		$100.00
To record rent accrued for month of December on the lease of the X building.		

5. ALTERNATIVE METHODS OF CLOSING ACCRUED ASSET ACCOUNTS

The purpose of the adjusting entries described in the preceding section is to take up all income that accrues to the closing date and to reflect in the books the asset values that represent the future income. These accrued asset values naturally remain on the books after all of the nominal accounts have been closed and ruled off.

Knowing something now of the origin and nature of accrued asset accounts, we may well ask: What becomes of such asset items as Accrued Interest Receivable and Accrued Rent Receivable after they have once been recorded? The answer is that accrued assets may be disposed of by either of two methods. One is known as the "split" method and the other is called the "reversal" method.

Text No. 6

As the split method is somewhat easier to understand, it may be advisable to consider that method first. Under this method all accrued asset accounts are allowed to remain open and are written off in the next period as payments affecting these accounts are received. To illustrate, assume that December 31 when the books are closed there are on hand the following interest-bearing notes receivable:

	Face Amount	Date	Time	Rate
Note #1	$8,000	November 1	90 days	6%
Note #2	4,000	December 16	60 days	6%

The interest accrued on these notes before and after December 31 may be summarized by a schedule as follows:

	Interest accrued to Dec. 31	Interest accrued after Dec. 31
Note #1	From Nov. 1 - $80	$40 to Jan. 30
Note #2	From Dec. 16 - $10	$30 to Feb. 14

The interest accrued at the close of the period would be recorded by the following journal entry:

December 31, 19--	DR.	CR.
Accrued Interest Receivable	$90.00	
Interest Income		$90.00
To record accrued interest on notes receivable for the period ending December 31, per Schedule.		

At the beginning of the new period the Accrued Interest Receivable account will remain open but the Interest Income account will be ruled off because its balance was transferred to Profit and Loss. The accounts show:

Accrued Interest Receivable		Interest Income	
Dec. 31 Accrued $90.00		Dec. 31 P & L $90	Dec. 31 Accrued $90

Had any other interest on notes receivable been collected in this period, the amount closed to Profit and Loss would have been greater than $90.

The problem now is to dispose of the accrued asset account, Accrued Interest Receivable, which stands with a debit balance of $90. When Note #1 falls due on January 30, the total interest of $120 collected is split, as it were, into two parts--one part, $80, being applied to cancel a portion of the accrued asset and the other part, $40, being taken up as income of the new period. The journal entry would be:

January 30, 19--		
Cash	$8,120.00	
Notes Receivable		$8,000.00
Accrued Interest Receivable		80.00
Interest Income		40.00
To record collection of Note #1 from Mr. X, dated November 1.		

When Note #2 falls due, similar procedure is followed. The journal entry will be:

February 14, 19--		
Cash	$4,040.00	
Notes Receivable		$4,000.00
Accrued Interest Receivable		10.00
Interest Income		30.00
To record collection of Note #2 from Mr. Y, dated December 16.		

The effect of the foregoing entries is to cancel the debit balance of $90.00 originally appearing in the Accrued Interest Receivable account and to reflect in the Interest Income account the earnings applicable to the next period. After posting the entries, the ledger accounts appear thus:

Accrued Interest Receivable

Dec. 31 Accrued	$90	Jan. 30	$80
		Feb. 14	10

Interest Income

Dec. 31 P & L	$90	Dec. 31 Accrued	$90
		Jan. 30	40
		Feb. 14	30

The foregoing is one well recognized method of handling accruals. Now we come to the alternative procedure, the "reversal method." Using similar facts as a basis for illustration, the same final result can be achieved as under the split method. Inasmuch as the adjusting entry recording the accrual at the close of the period is identical under either method, it is well to start with the ledger accounts at the beginning of the new period as shown on page 5.

Under the split method, the interest collection was divided as a credit between the Accrued Interest Receivable account and the Interest Income account; under the reversal method, the entire amount of interest collected will be, as a matter of expediency, credited to the Interest Income Account. Of course, the income of the next period arising out of the transaction is overstated when the entire amount of the payment is credited to Interest Income because, as heretofore explained, only part of this collection is income of the next period. However, the apparent error under the method we are now considering is taken care of by what is known as a "reversal" entry.

For example, take the collection of Note #1 where the total interest accrued on the due date was $120. The journal entry to record the collection, when the reversal method is used, will be:

January 30, 19--	DR.	CR.
Cash	$8,120.00	
Notes Receivable		$8,000.00
Interest Income		120.00
To record collection of Note #1, From Mr. X, dated November 1.		

The journal entry to record collection of Note #2 would be similar:

February 14, 19--	DR.	CR.
Cash	$4,040.00	
Notes Receivable		$4,000.00
Interest Income		40.00
To record collection of Note #2 from Mr. Y, dated December 16.		

If we assume that no other interest was received in the meantime, the two accounts Accrued Interest Receivable and Interest Income would appear:

Accrued Interest Receivable

Dec. 31 Accrued	$90		

Interest Income

Dec. 31 P & L	$90	Dec. 31 Accrued	$90
		Jan. 30	120
		Feb. 14	40

It is evident that at this point both of the accounts are overstated in the amount of $90. The excessive debit and credits, however, are easily corrected by the following reversal entry:

	DR.	CR.
Interest Income	$90.00	
Accrued Interest Receivable		$90.00
To reverse the adjusting entry for interest accrued on notes receivable, recorded December 31.		

While this entry debiting the income account and crediting the accrued asset could be set up at the close of the next period, the usual procedure is to make this entry at the beginning of the period, thus providing in advance for the correction that ultimately will be required. An entry of this kind is called a reversal entry because the debits and credits of the entry are just the reverse of those used to record the accrual at the close of the prior period. Compare the following accounts after posting the reversal with those illustrating the split method on page 6.

Accrued Interest Receivable

Dec. 31 Accrued	$90	Jan. 1	$90

Interest Income

Dec. 31 P & L	$90	Dec. 31 Accrued	$90
		Jan. 30	120
Jan. 1	90	Feb. 14	40

If a number of notes are collected from week to week it would seem that the reversal method has certain advantages in that the question of accruals has to be considered only at the close of an accounting period. At the same time, the journal entries are somewhat simplified as it will be unnecessary to divide interest collections between two accounts. If only a few items are involved, it makes little difference which method is used.

The principles outlined in connection with accrued interest on notes receivable are applicable to all other items of accrued asset values. Whenever a concern

receives income from rents, royalties, commissions or other similar sources, the question always arises at the close of an accounting period whether any income has accrued that is not recorded. If the answer is in the affirmative, an adjusting entry to record the accrued asset and income is required; and the accrued asset may be closed in the new period by reversal or by the split method.

6. EXPENSES RESULTING FROM ACCRUED LIABILITIES

The general principles of accounting for expenses offset by accrued liabilities are the same as those applying to accrued income. Of course, in journalizing the accrued expense we have a converse set of facts with which to deal. Further, when one concern has on its books an accrued asset and income item, the other business involved should record on its books an expense and accrued liability. For example, the maker of a note dated December 11, face amount $3,000, due in sixty days with interest at 6%, has a liability for $10 interest accrued at December 31. Assuming that his books are to be closed, the adjusting entry would be:

December 31, 19--	DR.	CR.
Interest Expense	$10.00	
Accrued Interest Payable		$10.00
To record interest to December 31, 19-- accrued on interest-bearing note payable.		

The debit portion of this entry represents an expense item incurred and the credit is a current liability to be paid in cash at some future date. Expenses such as these that accumulate against a business are referred to as accrued expenses and the debts that go with them are known as accrued liabilities. Accrued expenses are for services received during the present period but the liability for which is not due and payable until some future period.

Take another example: A contractor is closing his books on October 31. The Wages account, before any adjustments are made, stands with a debit balance of $4,800. The contractor has a weekly pay roll of $1,200 and it happens that October 31 falls on the second day of the wage week. Since two-sixths of the pay roll is accrued to October 31 but not payable until November 4, an adjustment is required at the close of the period. The journal entry is:

October 31, 19--	DR.	CR.
Wages	$400.00	
Accrued Wages Payable		$400.00
To record pay roll accrued for two days in October, 19--.		

Failure to make this adjustment would result in an understatement of expenses on the Profit and Loss Statement, thus overstating income; liabilities would be understated and capital overstated on the Balance Sheet. The ledger accounts affected would appear as follows after posting:

Wages		Accrued Wages Payable	
$4,800			
October 31 Accrued 400	Oct. 31 P & L $5,200		Oct. 31 Accrued $400

Accrued liability accounts, like accrued assets, may be disposed of in the subsequent period either by the split method or by the reversal method. In the case cited, if the reversal method were used the journal entries would be:

November 1, 19--	DR.	CR.
Accrued Wages Payable	$400.00	
Wages		$400.00
To reverse adjustment for accrued wages at October 31, 19--, thus transferring the liability to the credit side of the nominal account Wages.		
- 4 -		
Wages	$1,200.00	
Cash		$1,200.00
To record payment of weekly pay roll week of October --.		

The ledger accounts after posting the reversal and the entry for wages paid would show:

Wages		Accrued Wages Payable	
$4,800		Nov. 1 $400	Oct. 31 Accrued $400
Oct. 31 Accrued 400	Oct. 31 P & L $5,200		
$1,200	Nov. 1 400		

On the other hand, if the split method were used the bookkeeper need make only one entry:

November 4, 19--	DR.	CR.
Accrued Wages Payable	$400.00	
Wages	800.00	
Cash		$1,200.00
To record payment of weekly pay roll, week of October--.		

Compare the ledger accounts under this method with those above and notice that the results are the same:

Wages		Accrued Wages Payable	
$4,800		Nov. 4 $400	Oct. 31 Accrued $400
Oct. 31 Accrued 400	Oct. 31 P & L $5,200		
Nov. 4 $ 800			

The procedure illustrated in the case of wages would apply to any other accrual of similar nature. Expenses resulting from accrued liabilities may also arise in connection with interest on notes for mortgage payable, rent, royalties, taxes, commissions and so forth. In this event, adjustments similar to those explained in the foregoing discussion should be made to record the expense incurred and the liability for the accrued expense, and the accrued liability should be closed in the following period by reversal or by the split method.

7. UNRECORDED ITEMS ESTIMATED

Accruals referred to as unrecorded items were discussed separately on page 3 of this text. An accrual is completed except for cash payment, the full amount of the item being recorded at the time the books are closed. However, an accrued item involves a continuing transaction that carries over into the future period before full cash payment is due. For example, assume that property taxes assessed for the year and due are $505.60. This is merely an unrecorded expense and liability and should be recorded before closing the books for the accounting period:

	DR.	CR.
Dec. 31 Property Taxes	$505.60	
Taxes Payable		$505.60
To record unpaid taxes for the year ending December 31, 19--.		

Now assume that property taxes are levied on the basis of a fiscal year ending June 30, which does not coincide with our accounting period; and that in the current year we paid $500.00 taxes of which $250.00 is reflected in the Property Taxes account as expense for the period January 1 to June 30, 1943. If the assessment for the fiscal year ending June 30, 1944, is $505.60, one-half of this amount should be entered in the books at the close of the year as an accrued expense and liability:

	DR.	CR.
Dec. 31 Property Taxes	$252.80	
Accrued Taxes Payable		$252.80
To record assessed property taxes accrued for the period July 1 to Dec. 31.		

In both cases the liability for taxes was an ascertained amount. However, assume that tax assessments have not been levied when we close the books December 31. Therefore, it is not definitely known what amount of tax liability will be payable in 1944. We cannot ignore the fact that there is a liability for taxes at December 31 even though the exact amount is not known. It is a fact that tax expense for the first six months of the year was $250.00; and if it is not expected that there will be any material change in our tax liability for the next fiscal year, we can make the adjusting entry by estimating the expense and liability as follows:

ADJUSTMENTS AND ACCRUALS

Text No. 6

	DR.	CR.
Dec. 31 Property Taxes	$250.00	
Accrued Taxes Payable (estimated)		$250.00
Taxes estimated for the period July 1 to December 31 on the basis of taxes paid for the previous year.		

It is evident from the preceding discussion that an estimated liability such as this is of undeterminable amount and may require a correction entry when the actual sum is ascertained. However, it is more nearly correct to estimate than to ignore the tax liability altogether, for the reason that the financial condition of the organization is reflected in a more accurate manner at the close of the fiscal period.